

RICK SNYDER GOVERNOR MICHAEL P. FLANAGAN STATE SUPERINTENDENT

November 3, 2014

MEMORANDUM

TO: State Board of Education

FROM: Michael P. Flanagan, Chairman

SUBJECT: Presentation on Michigan Science Standards

Michigan is a state with a rich history of invention, research, and innovation in the sciences and engineering. Michigan's education system seeks to prepare students in our state to continue this tradition, and to develop scientific literacy for all to better understand the way our natural and technological world work and interconnect.

In order to ensure Michigan students have this knowledge, educators have developed standards for student performance and outcomes to define a common set of expectations around science and other content areas. These standards evolve over time and are generally updated every five to seven years, taking into account advances in the content and practices of the sciences, and research on effective teaching and learning practices. Since 2011, Michigan educators have worked with a variety of educational organizations to create new student performance expectations, crosscutting concepts and practices, and supporting resources for educators. These new Michigan Science Standards will be presented to the State Board of Education (SBE) for approval at the December 16, 2014 meeting.

Since the completion of these standards over nineteen months ago, the Michigan Department of Education has been investigating the range of considerations for implementation of these standards. These efforts were shared with the SBE over the past six months, through the following presentations:

- May 2014 A Vision for Science Education in Michigan
- August 2014 Assessing the Teaching and Learning of Science
- September 2014 Transitional Models for Science Education
- October 2014 Teacher Preparation, Credentialing, and Professional Learning for Science Education

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These presentations and resources culminate in an analysis of Michigan's current standards, and the proposed new science standards for Michigan. The Michigan Department of Education contracted an independent educational research organization, SRI International, to conduct a review of the current and proposed standards to assess their strength, relevance for implementation, and depth of understanding. This review will be shared with the SBE along with the proposed Michigan Science Standards, which are available at the links below:

- Attachment A Michigan K-12 Standards for Science (Draft) http://www.michigan.gov/documents/mde/Full_K-12 Science Standards 473974 7.pdf?
- Attachment B A Content Comparison Analysis of the Next Generation Science Standards and the Michigan Science Standards, by SRI International http://www.michigan.gov/documents/mde/Final_NGSS-MI-Content_Comparison_Study_473973_7.pdf?